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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,142	06/29/2001	Joseph Ku	10013827-1	5753

7590 08/10/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

CAO, CHUN

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 08/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/894,142

**Applicant(s)**

KU, JOSEPH

**Examiner**

Chun Cao

**Art Unit**

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-20 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The disclosure is object to because of the following informalities: the specification must identify any related application/patents by the serial number (not by the Attorney's Docket number and any other number) or patent number, if

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patented. Please make sure that the related information is up to date.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Fujii et al. (Fujii), U.S. patent no. 6,140,836.

As per claim 1, Fujii teaches a method for minimizing power consumption by a circuit [fig. 1; col. 3, lines 1-5], the method comprising steps of:

determining whether a predetermined period of time has expired, said predetermined period of time being associated with a predetermined period of time to detect a transition of an input or an output of a pipelined circuit [col. 5, lines 41-60; col. 7, lines 59-63]; and

performing a shut-down procedure on said pipelined circuit in response to said predetermined period of time expiring [col. 1, line 66-col. 2, line 13; col. 7, lines 29-32; col. 7, line 64-col. 8, line 6].

As per claim 2, Fujii teaches of detecting a transition at an input of said pipelined circuit [col. 5, lines 20-23, 41-55].

As per claim 3, Fujii teaches of performing a turn-on procedure on said pipelined circuit in response to detecting said transition at said input [col. 1, line 66-col. 2, line 13; col. 3, lines 1-5; col. 5, lines 41-60; col. 7, lines 3-8].

As per claim 4, Fujii teaches that pipelined circuit includes a plurality of stage circuits and said shut-down procedure comprises a step of sequentially suppressing power to each of said plurality of stage circuits starting from a first stage circuit of said plurality of stage circuits, said first stage circuit being connected to an input of said pipelined circuit [col. 7, lines 9-66].

As per claim 5, Fujii teaches that shut-down procedure is performed over multiple clock cycles, and said step of sequentially suppressing power further comprises suppressing power to one of said plurality of stage circuits after each of said multiple clock cycles [col. 7, lines 9-66].

As per claim 6, Fujii teaches that turn-on procedure further comprises a step of sequentially providing power to each of said stage circuits starting from said first stage circuit [fig. 2; col. 7, lines 9-66].

As per claim 7, Fujii teaches turn-on procedure is performed over multiple clock cycles, and said step of sequentially providing power further comprises providing power to one of said plurality of stage circuits after each of said multiple clock cycles [fig. 2; col. 7, lines 9-66].

As to claims 8-15 basically are the corresponding elements that are carried out the method of operating steps in claims 1-7. Fujii teaches the claimed method of steps. Therefore, Fujii teaches the claimed system for carrying out the method of steps.

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As to claims 16-20, Fujii teaches the claimed method of steps. Therefore, Fujii teaches the claimed system to carry out the method of steps.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaxiras et al., US publication no. 2002/0049918, teaches a method for removing power from caches lines that have been inactive for some period of time.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

A handwritten signature in black ink, appearing to read 'Chun Cao', with a stylized, cursive script.

Chun Cao

Aug. 4, 2004